Response to Office Action of June 8, 2007

Attorney Docket: BASIC-004A

## **AMENDMENTS TO THE CLAIMS**

1. (Currently Amended) A solid state thermal apparatus for dissipating heat from a heat source, the apparatus comprising:

a <u>multi-stage directional</u> heat transferring <u>eonverter enclosure</u> having an openended passageway, <u>the passageway defining first and second ends</u>, <u>each of said stages separated</u> by an insulator;

a plurality of solid state devices earried on said heat transferring converter

enclosure and thermally coupled to said heat source and said heat transferring enclosure, at least
one said solid state device associated with a stage of said heat transferring enclosure for
conductive transfer of heat energy from said solid state devices into said open ended
passageway;

a thermal cable coupling said heat source with said diode array;
a thermal conductive arrangement incorporated into said heat transferring
converter for conductive transfer of heat energy from said plurality of solid state devices into said open-ended passageway; and

<u>a</u> blower <u>means</u> disposed at <u>a selected the first</u> end of said passageway forcing heat energy <u>in into and through</u> said passageway <u>through said passageway to the second end of the passageway</u>.

2. (Currently Amended) The solid state thermal apparatus defined in Claim 1 wherein:

said selected <u>first</u> end of said passageway is an inlet and a <u>non-selected said</u> <u>second</u> end of said passageway is an exhaust exit; and

said blower means is disposed in said inlet and with forced heat energy is forced through said exhausting via said exit.

3. (Currently Amended) The solid state thermal apparatus defined in Claim 2-1 wherein said solid state devices include a plurality of diode arrays.

Response to Office Action of June 8, 2007

Attorney Docket: BASIC-004A

4. (Currently Amended) The solid state thermal apparatus defined in Claim 3 wherein:

said thermal conductive arrangement includes a plurality of stages indexed with each of said diode arrays the plurality of said plurality of stages is comprised of a plurality of panels on which the plurality of diodes are operably connected. for transferring heat energy away from the diodes to said thermal passageway.

5. (Currently Amended) The solid state thermal apparatus defined in Claim [[4]]1 wherein:

each of said thermal conductive stages is composed of a carbon graphite composition capable of conducting heat energy at least five times the rate of heat energy conduction of copper having a high rate of thermal conductivity.

6. (Currently Amended) The solid state thermal apparatus defined in Claim [[5]] <u>3</u> including:

a power source operably coupled to said diode arrays by a plurality of positive and negative terminals on said diode arrays.

7. (Currently Amended) The solid state thermal apparatus defined in Claim 6 including:

a pair of conductor plates associated with, each of said diode arrays connected between said pair of conductor plates; and said positive and negative terminals connected to each of said pair of conductor plates respectively.

8. (Currently Amended) A solid state thermal apparatus for dissipating heat from a heat source, the apparatus comprising:

a <u>multistage</u>, <u>directional</u> heat transferring <del>converter</del> <u>enclosure</u> having an enclosure defining an open-ended passageway <u>and a plurality of successive heat transference stages</u>, <u>each stage insulated from each other</u>;

Response to Office Action of June 8, 2007

Attorney Docket: BASIC-004A

an array of panels, with each panel carrying a plurality of diodes and the plurality of diodes thermally coupled to said heat source, the array of panels carried on the exterior of said heat transferring enclosure and disposed immediately adjacent to a respective heat transference stage for conducting heat energy from said array of panels to said heat transference stages for conductive transfer of heat energy into said open-ended passageway;

a thermal cable coupling said heat source with said array of panels;
said array of panels carried on the exterior of said heat transferring converter so as
to be in a heat transference relationship therewith;

said enclosure having a plurality of heat transference stages insulated from each other; and

each panel in said array of panels disposed immediately adjacent to a respective heat transference stage for conducting heat energy from said panels to said heat transference stages for conductive transfer of heat energy into said open-ended passageway.

9. (Currently Amended) The solid state thermal apparatus defined in Claim 8 wherein:

said passageway includes an inlet and an outlet with a blower mounted in said inlet for forcing a flow of ambient air through said passageway for and exhausting collected heat energy collected via said outlet.

10. (Currently Amended) The solid state thermal apparatus defined in Claim 9 Claim 8 wherein:

each of said heat transference stages is composed of carbon graphite composition composite material having a high rate of thermal conductivity.

## 11. (Cancelled)

12. (Currently Amended) The solid state thermal apparatus defined in Claim 10 Claim 8 including:

a power source operably connected to said diodes.

Response to Office Action of June 8, 2007

Attorney Docket: BASIC-004A

13. (Currently Amended) The solid state thermal apparatus defined in Claim 12

Claim 8 wherein-further comprising:

said a thermal cable that couples said array of panels with said heat source includes a plurality of parallel paths carried on a flexible cable.

14. (Currently Amended) The solid state thermal apparatus defined in Claim 13 wherein:

each of said diodes is a ceramic quartz diode; and said graphite material is heat conductive directional.

- 15. (New) The solid state thermal apparatus defined in Claim 1 wherein: the plurality of stages are arranged in a stacked arrangement.
- 16. (New) The solid state thermal apparatus defined in Claim 5 wherein: said carbon graphite composition is heat conductive directional.
  - 17. (New) A solid state thermal apparatus for dissipating heat from a heat source, the apparatus comprising:

an array of panels thermally coupled with said heat source with each panel carrying a plurality of ceramic quartz diodes;

a thermal cable having a plurality of parallel paths carried on a flexible cable, the thermal cable coupling the heat source with the array of panels;

a <u>multi-stage directional</u> heat transferring enclosure having an open-ended passageway and a plurality of heat transference stages insulated from each other, said heat transference stages composed of carbon graphite composition having a high rate of thermal conductivity and being heat conductive directional;

said array of panels carried on the heat transferring enclosure, each panel disposed immediately adjacent to a respective heat transference stage for conducting heat energy from said panels to said heat transference stages for conductive transfer of heat energy into said open-

Response to Office Action of June 8, 2007

Attorney Docket: BASIC-004A

ended passageway, each panel includes a multiplicity of diodes for conducting heat energy by pulling heat energy from said heat source; and

a power source operably connected to said diodes.